

Permit number: DC 0000019

**AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE
ELIMINATION SYSTEM**

In compliance with the provisions of the Clean Water Act, as amended, 33 U.S.C.A. § 1251 et seq.
(The "Act")

Department of the Army
Baltimore District, Corps of Engineers
Washington Aqueduct Division

Referred to herein as "Permittee"

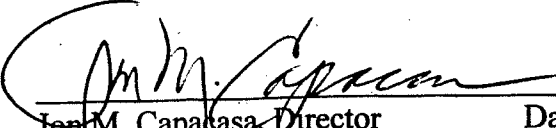
is authorized to discharge from a facility located at

5900 MacArthur Boulevard, NW
Washington D.C. 20016-2514

to receiving waters named the Potomac River, Rock Creek, Mill Creek and Little Falls Branch in
accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I,
II, and III herein.

This permit shall become effective on November 20, 2008.

This permit and the authorization to discharge shall expire 5 years after this date.


Jon M. Capatasa, Director

Date

October 20, 2008

Water Protection Division

U.S. Environmental Protection Agency, Region III

Part I - EFFLUENT LIMITS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - DALECARLIA SEDIMENTATION BASINS

During the period beginning with the effective date and lasting through the expiration date of this permit, the permittee is authorized to discharge from Dalecarlia Sedimentation Basins Numbers 1, 2, 3 and 4 through Outfall 002. These discharges are subject to the special condition provisions found in Part III of this permit.

Discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic kg/day(lb/day)	Discharge Limitations			Monitoring Requirements		
	Other Limits (Specify)			Measurement Sample		
	Avg Monthly	Max. Daily	Avg Monthly	Max. Daily	Frequency	Type
Flow (mgd)	N/A	N/A	N/L	N/L	Continuous	Recorded
Total Suspended Solids	N/A	N/A	30 mg/l	60 mg/l	2x week	24-hr. composite
Aluminum (total)	N/A	N/A	4.0 mg/l	8.0 mg/l	2x week	24 hr. composite
Iron (total recoverable and dissolved) ⁽¹⁾	N/A	N/A	155 mg/l	226 mg/l	2x week	24 hr. composite
Chlorine, total residual ⁽²⁾	---	---	---	---	1x day	grab
Removal ⁽³⁾	-----	---	85% (minimum) for TSS	-----	-----	-----
Copper ⁽⁴⁾ (total recoverable and dissolved)	N/A	N/A	0.61 mg/l	0.90 mg/l	2x week	24-hr. composite

The pH shall not be less than 6.0 standard units or greater than 8.5 standard units and shall be monitored once per day by grab sample. NL for flow means no limit

There shall be no discharge of floating solids or visible foam in other than trace amounts

Samples taken in compliance with the monitoring requirements specified above, with the exception of the chlorine samples shall be taken at the location in each of the sedimentation basins where the effluent discharges from that basin. The sampling point for the chlorine samples for Outfall 002 shall be in an access port in the discharge pipe between the Dalecarlia Basins and the point of entry into the Potomac River.

(1) - New limit based on Reasonable Potential Analysis and DC Water Quality Standard, Chronic Exposure Criterion.

(2) - No chlorine shall be discharged in detectable amounts. For the purpose of this permit no detectable amounts is defined as <0.1 mg/L.

(3) - Using a combination of engineering and/or Best Management Practices, the permittee shall increase the amount incoming residual solids removed from the Dalecarlia sedimentation basins to meet the TSS removal effluent limit. This represents a minimum of 85% removal of incoming solids to the sedimentation basins.

(4) - New limit based on Reasonable Potential Analysis and DC Water Quality Standard, Acute Exposure Criterion.

B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - GEORGETOWN SEDIMENTATION BASINS

During the period beginning with the effective date and lasting through the expiration date of this permit, the permittee is authorized to discharge from the Georgetown Sedimentation Basins through Outfalls 003 and 004. Outfall 004 is the discharge point for effluent and solids from the Georgetown sedimentation basin #1. Outfall 004 and Outfall 003 are discharge points for effluent and solids from the Georgetown sedimentation basin #2. These discharges are subject to the special condition provisions found at Part III of this permit.

Discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u> <u>kg/day(lb/day)</u>	<u>Discharge Limitations</u>			<u>Monitoring Requirements</u>	
	<u>Other Limits (Specify)</u>			<u>Measurement</u>	<u>Sample</u>
	<u>Avg Monthly</u>	<u>Max. Daily</u>	<u>Avg Monthly</u>	<u>Frequency</u>	<u>Type</u>
Flow (mgd)	N/A	N/A	N/L	continuous	recorded
Total Suspended Solids	N/A	N/A	30 mg/l	2x week	24-hr. composite
Aluminum (total) (3)	N/A	N/A	1.0 mg/l	2x week	24-hr. composite
Iron (total recoverable and Dissolved) (1)	N/A	N/A	1.9 mg/l	2x week	24-hr. composite
Removal (2)	----- 85% (minimum) for TSS -----				
Copper (4) (total recoverable and dissolved)	N/A	N/A	0.017 mg/l	2 x week	24-hr. composite

The pH shall not be less than 6.0 standard units nor greater than 8.5 standard units and shall be monitored once per day by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the location in each of the sedimentation basins where the effluent is discharged from that basin.

(1) - New limit based on Reasonable Potential Analysis, DC Water Quality Standards, Chronic Exposure Criterion, the translator is considered to be 1:1.

(2) - Using a combination of engineering and/or Best Management Practices, the permittee shall increase the amount incoming residual solids removed from the Georgetown sedimentation basins to meet the TSS removal effluent limit. This represents a minimum of 85% removal of incoming solids to the sedimentation basins.

(3) - New limit based on Reasonable Potential Analysis and Technology Based Standards, Acute Exposure Criterion.

(4) - New limit based on Reasonable Potential Analysis and DC Water Quality Standards, Acute Exposure Criterion

C. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - OTHER DALECARLIA DISCHARGE

During the period beginning with the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge effluent comprised of leakage and/or discharge from a spring located underneath the Dalecarlia Sedimentation Basins through Outfall 002. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations			Monitoring Requirements		Type
	All Units (mg/L)			Measurement	Sample	
	Avg Monthly	Max. Daily	Avg Monthly	Max Daily	Frequency	
Flow (mgd)	N/A	N/A	N/L	N/L	1x quarter	estimate
Total Suspended Solids	N/A	N/A	30	60	1x quarter	grab
Total Aluminum	N/A	N/A	4.0	8.0	1x quarter	grab
Iron (dissolved and total recoverable)	N/A	N/A	N/A	N/A	1x quarter	grab
Total Residual Chlorine ⁽¹⁾	---	---	---	---	1 x quarter*	grab
Perchlorate	N/A	N/A	N/L	N/L	1 x quarter	grab
Chloroform	N/A	N/A	N/L	N/L	1 x quarter	grab

The pH shall not be less than 6.0 standard units or greater than 8.5 standard units and shall be monitored once per quarter by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

(1) - No Chlorine shall be discharged in detectable amounts. For the purpose of this permit no detectable amounts is defined as <0.10 mg/L. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location for the underdrain. Samples shall be taken from an access port in the discharge pipe between the point at which the basin underdrains tie into a single pipe and the point of entry to the Potomac River.

* In addition to the monitoring requirement of 1x quarter, monitoring will be done at a frequency of 1x day grab whenever pre-chlorination to the Dalecarlia sedimentation basins is occurring.

D. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - CITY TUNNEL AND GEORGETOWN CONDUIT

During the period beginning with the effective date and lasting through the expiration date of this permit, the permittee is authorized to discharge from Outfall number 006 directly to the Potomac River and from Outfall 007 from the City Tunnel to Rock Creek. Discharge from Outfall 006 is treated water blowoff from the Georgetown Conduit. Discharge from Outfall 007 is treated water blowoff from the City Tunnel.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Monitoring Requirements</u>	
	<u>kg/day(lb/day)</u>	<u>All Units (mg/L)</u>	<u>Measurement</u>	<u>Sample</u>	<u>Type</u>
	<u>Avg Monthly</u>	<u>Max. Daily</u>	<u>Avg Monthly</u>	<u>Max Daily</u>	<u>Frequency</u>
Flow (mgd)	N/A	N/A	N/L	N/L	1x discharge estimate
Total Suspended Solids	N/A	N/A	30	60	1x discharge Grab*
Total Aluminum	N/A	N/A	4.0	8.0	1x discharge Grab*
Iron (dissolved and total recoverable)	N/A	N/A	4.0	8.0	1x discharge Grab*
Total Residual Chlorine ⁽¹⁾	---	---	---	---	1x discharge Grab*

The pH shall not be less than 6.0 standard units nor greater than 8.5 standard units and shall be monitored at the point of discharge.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

¹⁾ No chlorine shall be discharged in detectable amounts. For the purpose of this permit no detectable amounts is defined as <0.10 mg/L.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: at Outfalls 006 and 007.

* A grab sample shall be taken at the beginning and the midpoint of the above discharges, except for Total Residual Chlorine which shall be sampled at the start of the discharge.

E. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Second High Reservoir

During the period beginning with the date of issuance and lasting through the expiration date of this permit, the permittee is authorized to discharge from Outfall number 008 to Mill Creek. Mill Creek is a tributary to Little Falls Branch. Discharge from Outfall 008 is dechlorinated potable water from the Second High Reservoir.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Monitoring Requirements</u>		
	<u>kg/day(lb/day)</u>	<u>All Units (mg/L)</u>		<u>Measurement Frequency</u>	<u>Sample Type</u>	
		<u>Max. Daily</u>	<u>Avg Monthly</u>			
Flow (mgd)	N/A	N/A	N/L			
Total Suspended Solids	N/A	N/A	30	1x discharge	estimate	Grab*
Total Aluminum	N/A	N/A	4.0	1x discharge	Grab*	
Iron (dissolved and total recoverable)	N/A	N/A	4.0	1x discharge	Grab*	
Total Residual Chlorine ⁽¹⁾	----	----	----	1x discharge	Grab*	

The pH shall not be less than 6.0 standard units nor greater than 8.5 standard units and shall be monitored at the point of discharge.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

¹⁾ No chlorine shall be discharged in detectable amounts. For the purpose of this permit no detectable amounts is defined as <0.10 mg/L.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: at the manhole on the north side of the 45th and Van Ness streets intersection.

* A grab sample shall be taken at the beginning and the midpoint of the above discharges, except for Total Residual Chlorine which shall be sampled at the start of the discharge.

F. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Third High Reservoir

During the period beginning with the date of issuance and lasting through the expiration date of this permit, the permittee is authorized to discharge from Outfall number 009 directly to Mill Creek. Mill Creek is a tributary to Little Falls Branch. Discharge from Outfall 009 is dechlorinated potable water from the Third high reservoir.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Monitoring Requirements</u>	
	<u>All Units (mg/L)</u>			<u>Measurement</u>	<u>Sample</u>
	<u>Avg Monthly</u>	<u>Max. Daily</u>	<u>Avg Monthly</u>	<u>Frequency</u>	<u>Type</u>
Flow (mgd)	N/A	N/A	N/A	1x discharge	estimate
Total Suspended Solids	N/A	N/A	30	1x discharge	Grab*
Total Aluminum	N/A	N/A	4.0	1x discharge	Grab*
Iron (dissolved and total recoverable)	N/A	N/A	4.0	1x discharge	Grab*
Total Residual Chlorine ⁽¹⁾	---	---	---	1x discharge	Grab*

The pH shall not be less than 6.0 standard units nor greater than 8.5 standard units and shall be monitored at the point of discharge.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

¹⁾ No chlorine shall be discharged in detectable amounts. For the purpose of this permit no detectable amounts is defined as <0.1 mg/L.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: from the 24" overflow line located in the manhole east of the Davenport and Belt Road streets intersection.

* A grab sample shall be taken at the beginning and the midpoint of the above discharges, except for Total Residual Chlorine which shall be sampled at the start of the discharge.

Part II STANDARD CONDITIONS FOR NPDES PERMITS

SECTION A. GENERAL CONDITIONS

1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for an enforcement action; for permit termination, revocation and re-issuance or modification; and/or for denial of a permit renewal application.

2. Penalties for Violations of Permit Conditions.

a. Criminal Penalties

1. Negligent Violations. Section 309(c)(1) of the Clean Water Act (CWA), 33 U.S.C. § 1313(c)(1), provides that any person who negligently violates any permit, condition or limitation implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA, is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year or both.

2. Knowing Violations. Section 309(c)(2) of the CWA, 33 U.S.C. § 1313(c)(2), provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years or both.

3. Knowing Endangerment. Section 309(c)(3) of the CWA, 33 U.S.C. § 1313(c)(3), provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA, and knows at the time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 years, or both.

4. False Statement. Section 309(c)(4) of the CWA, 33 U.S.C. § 1313(c)(4), provides that any person who knowingly makes any false material statement, representation or certification in any application, record, report, plan or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than 2 years, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years or by both. False statements concerning matters with the jurisdiction of a federal agency are also punishable pursuant to 18 U.S.C. § 1001 by a prison term of up to five years, a fine imposed under Title 18, Crimes and Criminal Procedure,

of the United States Code, or by both.

b. Civil Penalties

1. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 301, 318 or 405 of the Act is subject to a civil penalty not to exceed \$27,500 per day for each violation.

c. Administrative Penalties

1. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the Act is subject to an administrative penalty as follows:

i.. Class I Penalty. Not to exceed \$11,000 per violation nor shall the maximum amount exceed \$27, 500.

ii.. Class II Penalty. Not to exceed \$11,000 per day for each day during which the violation continues nor shall the maximum amount exceed \$137,500.

3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

4. Toxic Pollutants

Notwithstanding Section A, Paragraph 12, below, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under section 307(a) of the Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the permittee shall be so notified.

The permittee shall comply with effluent standards or prohibition established under section 307(a) of the Clean Water Act for toxic standards within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Civil and Criminal Liability

Except as provided in permit conditions on "Bypassing" Part II, Section B, Paragraph 3 and "Upsets" Part II, Section B, Paragraph 4, nothing in this permit shall be construed to relieve

the permittee from civil or criminal penalties for noncompliance.

6. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

7. State Laws.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any District of Columbia law or regulation under authority preserved by Section 510 of the Act. No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

8. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

9. Severability

The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Transfer of Permit

In the event of any change in ownership or control of facilities from which the authorized discharge emanates, the permit may be transferred to another person if:

- a. The current permittee notifies the Director, in writing of the proposed transfer at least 30 days in advance of the proposed transfer date;
- b. The notice includes a written agreement, between the existing and new permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
- c. The Director does not notify the current permittee and the new permittee of intent to modify, revoke and reissue, or terminate the permit and require that a new application be submitted.

11. Construction Authorization

This permit does not authorize or approve the construction of any onshore or physical structures or facilities or the undertaking of any work in any navigable waters.

12. Reopener Clause for permits

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301, 302, 304, and 307 of the Clean Water Act, if the effluent standard or limitations issued or approved:

- a. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b. Controls any pollutant not limited in the permit. The permit, as modified or reissued under this Paragraph, shall also contain any other requirements of the Act then applicable.

This permit may be modified, revoked and reissued, or terminated for cause as specified at 40 C.F.R. §§ 122.44(c), 122.62, 122.63, 122.64 and 124.5.

This permit may be modified, or alternatively, revoked and reissued to comply with any State or Federal law or regulation that addresses Water Quality Standards, Total Maximum Daily Loads or any provision of this permit that is promulgated subsequent to the effective date of the permit. If the permittee submits information demonstrating that the prohibition against discharge during the spring spawning season is not necessary to protect the Potomac Fishery and its habitat the permittee may request a modification of the permit. If the permittee seeks modification of this permit, permittee shall submit its request to modify this permit in writing along with information supporting this request to EPA Region III and the National Marine Fisheries Service (NMFS). Any proposed modification of this permit will comply with Section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. § 1531 et seq.) and its implementing regulations.

13. Endangered Species

EPA is required to consult under Section 7(a)(2) of the Endangered Species Act (ESA) regarding issuance of an NPDES permit that may affect any federally listed endangered or threatened species. On November 5, 2002, National Oceanic and Atmospheric Administration (NOAA) Fisheries issued a Biological Opinion (BO) for the draft Washington Aqueduct permit. The BO took into account the protection provided by the prohibition on discharges during the spring spawning season in Part III. As a result of recommendations by NOAA Fisheries in the BO,

EPA incorporated additional notification requirements found in Part III E of this permit and the performance of additional studies, found in Part III.D. These requirements are continued in this permit, until such time as the residuals processing facility is on line or November 30, 2010, whichever occurs earlier.

In addition, this permit requires that the permittee submit to NMFS an annual calendar year compilation of the Discharge Monitoring Reports (DMRs), which will be used by NMFS to further assess the potential for effects on endangered or threatened species. If these data indicate it is appropriate, requirements of this NPDES permit may be modified to prevent adverse impacts on habitats of endangered and threatened species.

The set of DMRs for each calendar year are to be submitted by February 15 of the following year to:

The National Marine Fisheries Service (NMFS)
Protected Resource Division
1 Blackburn Drive
Gloucester, MA 01930
Attention: Endangered Species Coordinator

National Park Service (NPS)
C&O Canal NHP
1850 Dual Highway, Suite 100
Hagerstown, Maryland 21740
Attention: Superintendent

National Park Service (NPS)
National Capital Region
1100 Ohio Drive, SW
Washington, DC 20242
Attention: Regional Director

Interstate Commission on the Potomac River Basin (ICPRB)
Suite 300
6110 Executive Boulevard
Rockville, MD 20852
Attention: Executive Director

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate, inspect and maintain all facilities and systems of treatment and control (and related appurtenances including sewers, intercepting chambers, interceptors, combined sewer overflows, and emergency bypasses) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Removed Substances

Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent all pollutants from such materials from entering navigable waters.

3. Bypass of Treatment Facilities

a. Definitions

- i. Bypass means the intentional diversion of waste streams from any portion of a treatment facility to the receiving stream.
- ii. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

- b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Subparagraphs c and d of this Paragraph.

c. Notice

- i. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass.

- ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II, Section D, Paragraph 6 (24-hour notice).
- iii. Permittee must use its best efforts to notify National Oceanic and Atmospheric Administration (NOAA) Fisheries, orally and in writing, 24 hours in advance of a discharge taking place and no later than 24 hours after commencement of the discharge (if it is an unanticipated bypass) during the shortnose sturgeon spawning season. The shortnose sturgeon spawning season is defined as March 1 - May 15. Such notice shall be made to the ESA Section 7 Fishery Biologist at 978-281-9328 or the Endangered Species Coordinator at 978-281-9208, or a NOAA Fisheries designee contacted through the NOAA Fisheries general number at 978-281-9328.
- iv. Notice of all bypass occurrences, including but not limited to the location, time and duration of the bypass shall be made to EPA Region III, District of Columbia Department of the Environment (DDOE), United States Fish and Wildlife Service (US FWS), National Park Service (NPS), the Interstate Commission on the Potomac River Basin (ICPRB) and the National Marine Fisheries Service (NMFS). Notice to the NPS and NMFS shall be sent to the names and addresses found at Part II.A.13 above. Notice to EPA and DDOE shall be sent to the names and addresses found at Part II.C.5 below. Notice to the US FWS shall be made to the following address:

177 Admiral Cochrane Drive,
Annapolis, MD 20401,
Attention: Environmental Contaminants
Chris Guy

d. Prohibition of bypass.

- i. Bypass is prohibited and the Director may take enforcement action against a permittee for bypass, unless:
 - 1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - 2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment

downtime. This conditions is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

3. The permittee submitted notices as required under Subparagraph c of this Paragraph.

4.. The permittee meets the requirements found at Part III Section E of this permit.

ii. The Director may approve an anticipated bypass after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in Subparagraph d(i) of this Paragraph.

4. Upset Conditions

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Subparagraph c of this Paragraph are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:

- i. An upset occurred and that the permittee can identify the specific cause(s) of the upset;
- ii. the permitted facility was at the time being properly operated;
- iii. the permittee submitted notice of the upset as required in Part II, Section D, Paragraph 6; and

- iv. the permittee complied with any remedial measures required under Part II, Section A, Paragraph 3.
- v. Permittee must use its best efforts to notify National Oceanic and Atmospheric Administration (NOAA) Fisheries, orally and in writing, 24 hours in advance of a discharge taking place and no later than 24 hours after commencement of the discharge (if it is an unanticipated upset) during the shortnose sturgeon spawning season. Such notice shall be made to the ESA Section 7 Fishery Biologist at 978-281- 9328 or the Endangered Species Coordinator at 978- 281-9208, or a NOAA Fisheries designee contacted through the NOAA Fisheries general number at 978-281-9328.
- vi. Notice of all upset occurrences, including but not limited to the location, time and duration of the upset shall be made to EPA Region III, DDOE, US FWS, NPS, ICPRB and NMFS. Notice to the NPS and NMFS shall be sent to the names and addresses found at Part II.A.13 above. Notice to EPA and DDOE shall be sent to the names and addresses found at Part II.C.5 below. Notice to the US FWS shall be made to the following address:

177 Admiral Cochrane Drive,
Annapolis, MD 20401,
Attention: Environmental Contaminants Program Leader.

- d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

SECTION C. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in the permit. Monitoring points shall not be changed without notification to and the approval of the Director.

2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to insure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted

capability of that type of device.

3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 C.F.R. Part 136, unless other test procedures have been specified in this permit.

4. Penalties for Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

5. Reporting of Monitoring Results

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1). Monitoring results shall be submitted each month and reported on a DMR form postmarked no later than the 28th day of the following month. Copies of DMRs signed and certified as required by Part II, Section D, Paragraph 10, and all other reports required by Part II, Section D, Reporting Requirements, shall be submitted to the Director and the DDOE at the following addresses:

U.S. EPA Region III (3WP31)
Water Protection Division
NPDES DMRs
1650 Arch Street
Philadelphia, PA 19103

and

Government of the District of Columbia
Department of the Environment
Water Quality Division
51 N Street, 5th Floor, NE
Washington, DC 20002

In addition, a complete set of Discharge Monitoring Reports shall be sent to the National Marine Fisheries Service, the National Park Service and to the Interstate Commission on the Potomac River Basin to the names and addresses specified at Part II.A.13 of this permit. Such monitoring reports shall be compiled for the preceding calendar year and sent to NMFS on or before February 15 of the next calendar year.

6. Monitoring and Analytical Equipment Maintenance

The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals frequent enough to insure accuracy of measurements and shall insure both calibration and maintenance activities will be conducted.

7. Analytical Quality Control

An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results, shall be maintained by the permittee or designated commercial laboratory.

8. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 C.F.R. 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR form. Such frequency shall also be indicated.

9. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance record and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for the life of this permit.

10. Record Contents

Records of monitoring information shall include:

- a. The date, exact place, time and methods of sampling of measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

11. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other document as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purpose of assuring permit

compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

12. Definitions

- a. The "daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represent the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
- b. The "average monthly discharge limitation" means the highest allowable average of "daily discharge" over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
- c. The "maximum daily discharge limitation" means the highest allowable "daily discharge."
- d. "Grab sample" - An individual sample collected in less than 15 minutes.
- e. "At Outfall XX" - A sample location before the effluent joins or is diluted by any other waste stream, body of water, or substance or as otherwise specified.
- f. "Estimate" - To be based on a technical evaluation of the sources contribution to the discharge including, but not limited to pump capabilities, water meters and batch discharge volumes.
- g. "Director" means the EPA Regional Administrator or an authorized representative.
- h. "Spring Spawning Season" means the period February 15 through June 30 each calendar year.
- i. "Shortnose Sturgeon Spawning Season" means March 1 through May 15 of each calendar year or when water temperatures are between 8° C and 15° C.
- j. "Batch Discharge" is intended to mean a planned basin discharge or upset or bypass. It is not a discharge that results from leakage from the Dalecarlia Sedimentation basins.

SECTION D. REPORTING REQUIREMENTS

1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. The permittee may submit to the permitting authority requests for modification of this provision in accordance with future promulgated regulations.

2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit regulations.

3. Transfers

This permit is not transferable to any person except after notice to the Director as specified in Part II, Section A, Paragraph 10. The Director may require modification or revocation and reassurance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

4. Monitoring Reports

Monitoring results shall be reported at the intervals and in the form specified in Part II, Section C, Paragraph 5 (Reporting of Monitoring Results).

5. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance may include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

6. Twenty-Four Hour Reporting

The permittee shall report to EPA, DDOE, USNPS, USFWS, ICPRB and NMFS at the addresses listed in Part II.A.13 and Part II.C.5 of this permit of any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the

noncompliance has not been corrected, the anticipated time it is expected to continue; the steps taken or planned to reduce, eliminate, prevent recurrence of the noncompliance; and the steps taken to minimize any adverse impacts to navigable waters and/or park resources.

The following shall be included as information which must be reported within 24 hours:

- a. Any unanticipated bypass which exceeds any effluent limitation to the permit.
- b. Any upset which exceeds any effluent limitation in the permit.
- c. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part I of this permit.

Notification shall include a description of the problem causing the need for release, the date and anticipated time of the release, name and telephone number of a knowledgeable individual.

The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours and the noncompliance does not endanger health or the environment; however, oral and written notification of all noncompliance must be provided to the National Park Service.

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Part II, Section D, Paragraphs 1, 2, 4, 5, and 6 at the time monitoring reports are submitted. The reports shall contain the information listed in Paragraph 6.

8. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

9. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. In the event that a timely and complete re-application has been submitted and the Director is unable, through no fault of the permittee, to issue a new permit before the expiration date of this permit, the terms and conditions of this permit are automatically continued and remain fully effective and enforceable.

10. Signatory Requirements

All applications, reports or information submitted to the Director shall be signed and certified as required by 40 C.F.R. 122.22.

11. Availability of Reports

Unless a confidentiality claim is asserted pursuant to 40 C.F.R. Part 2, all reports submitted in accordance with the terms of this permit shall be available for public inspection at the offices of the Director. If a confidentiality claim is asserted, the report will be disclosed only in accordance with the procedures in 40 C.F.R. Part 2. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.

12. Correction of Reports

If the permittee becomes aware that it submitted incorrect information in any report to the Director, it shall promptly submit the correct information.

13. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe that any activity has occurred or will occur that would result in the discharge of any toxic pollutant which is not limited in this permit.

SECTION E - BEST MANAGEMENT PRACTICES

1. Applicability

These conditions apply to all permittees who use, manufacture, store, handle or discharge any pollutant listed as toxic under Section 307(a)(1) of the Clean Water Act or any pollutant listed as hazardous under Section 311 of the Act and who have ancillary manufacturing operations which could result in significant amounts of these pollutants reaching waters of the United States. These operations include material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations and sludge

and waste disposal areas.

2. Best Management Practices Plan

The permittee shall review and update its Best Management Practices (BMP) plan which prevents, or minimizes the potential for the release of toxic substances from ancillary activities to the waters of the United States through plant site runoff; spillage or leaks; sludge or waste disposal; or drainage from raw material storage.

3. Implementation

Improvements identified pursuant to section 2 above shall be implemented as soon as possible but not later than one year after the effective date of the permit.

4. General Requirements

The BMP plan shall:

1. Be documented in narrative form, and shall include any necessary plot plans, drawings or maps.
2. Establish specific objectives for the control of toxic and hazardous pollutants
 - i. Each facility component or system shall be examined for its potential for causing a release of significant amounts of toxic or hazardous pollutants to waters of the United States due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.
 - ii. Where experience indicates a reasonable potential for equipment failure, e.g., a tank overflow or leakage, natural condition, e.g., precipitation, or other circumstances to result in significant amounts of toxic or hazardous pollutants reaching surface waters, the plan should include a prediction of the direction, rate of flow and total quantity of toxic or hazardous pollutants which could be discharged from the facility as a result of each condition or circumstance.
3. Establish specific best management practices to meet the objectives identified under Subparagraph 2 of this Paragraph, addressing each component or system capable of causing a release of significant amounts of toxic or hazardous pollutants to the waters of the United States.
4. Include any special conditions established in Part III of this permit.

5. Be reviewed by plant engineering staff and the plant manager.

5. Specific Requirements

The plan shall be consistent with the general guidance contained in the publication entitled "NPDES Best Management Practices Guidance Document" and shall, at a minimum, include the following baseline BMPs:

- a. BMP committee
2. Reporting of BMP incidents
3. Risk identification and assessment
4. Employee training
5. Inspections and records
6. Preventive maintenance
7. Good housekeeping
8. Materials compatibility
9. Security
10. Materials inventory

6. Hazardous Waste Management

The permittee shall assure the proper management of solid and hazardous waste in accordance with regulations promulgated under the Solid Wastewater Disposal Act, as amended by the Resource Conservation and Recovery Act of 1978 (RCRA) (40 U.S.C. 6901 et seq.) Management practices required under RCRA regulations shall be referenced in the BMP plan.

7. Documentation

The permittee shall maintain a description of the BMP plan at the facility and shall make the plan available to the Director upon request.

8. BMP Plan Modification

The permittee shall amend the BMP plan whenever there is a change in the facility or change in the operation of the facility which materially increased the potential for the ancillary activities to result in a discharge of significant amount of hazardous or toxic pollutants.

9. Modification for Effectiveness

If the BMP plan proves to be ineffective in achieving the general objective of preventing the release of significant amounts of toxic or hazardous pollutants to surface waters and the specific objectives and requirements under Part II, Section E, Paragraph 4, Subparagraphs 2

and 3, of the permit and/or the BMP plan shall be subject to modification to incorporate revised BMP requirements.

PART III SPECIAL CONDITIONS

All special conditions implementation plans and study plans required under Part III shall be developed and submitted by the permittee to EPA for review, comment and approval. EPA will coordinate with other involved federal agencies and DDOE during the review, comment and approval of these plans and their implementation. Involved federal agencies are not limited to those identified in this permit.

The permittee is authorized to discharge in accordance with the terms and conditions set forth in Part I of this permit.

During the spring spawning season there shall be no direct discharge of the contents of the sedimentation basins through outfalls 002, 003 or 004.

A. DALLICARLIA SEDIMENTATION BASINS. The following conditions shall apply to the discharges from the Dalecarlia Sedimentation basins through Outfall 002.

1. Part III of this permit specifically prohibits the direct discharges of contents of the sedimentation basins during the Spring Spawning Season (February 15 through June 30). In the event that a discharge as a result of a bypass or upset occurs during this period of time, the permittee shall follow notification procedures found at Part II.B.3.c.iii; Part II.B.3.c.iv; Part II.B.4.c.v; and shall take the actions found at Part II.D.6 and Part III.E of this permit.
2. Permittee is required to test the liquid and solid discharge from the Dalecarlia basins for chlorine. The sampling location shall be at an access port in the discharge pipe between the Dalecarlia Basins and the point of entry into the Potomac River. If these samples show a detectable level of chlorine, which for the purpose of this permit is defined as equal to or greater than 0.1 mg/L, the permittee shall provide treatment to ensure that the discharge contains no detectable amounts of chlorine before it is discharged to the Potomac River.
3. Permittee is not authorized to discharge from the Dalecarlia Sedimentation Basins through Outfall 002 upon the completion of the Residuals Processing Facility or no later than November 30, 2010, whichever comes first. After the residuals processing facility is operable, in the event that there is leakage, runoff, small amounts of wash waters or other accumulations of non-process waters in the basins, the Corps may request, in writing, authority to discharge these waters from outfall 002. The request must contain a certified chemical analysis describing the pollutants and concentrations of those pollutants. The analyses must be performed for the pollutants named in Part I.A of this permit and the concentrations of those pollutants must meet the numeric and narrative limits described therein. The request must be made no later than two weeks

prior to the proposed discharge and shall be sent to EPA Region III and the DDOE.

B. GEORGETOWN SEDIMENTATION BASINS. The permittee is authorized to discharge in accordance with the terms and conditions set forth in Part I of this permit. In addition, the following conditions shall apply to the discharges from the Georgetown sedimentation basins through Outfalls 003 and 004.

1. Part III of this permit specifically prohibits discharges during the Spring spawning season (February 15 through June 30). In the event that a discharge of contents directly from the sedimentation basins occurs as a result of a bypass or upset during this period of time, the permittee shall follow notification procedures found at Part II.B.3.c.iii; Part II.B.3.c.iv; Part II.B.4.c.v; and shall take the actions found at Part III.D.6 and Part III.E of this permit.
2. The permittee is not authorized to discharge from Outfall 003 or 004 upon completion of the Residuals Processing Facility or after November 30, 2010, whichever ever comes first. After the residuals processing facility is operable, in the event that there is leakage, runoff, small amounts of wash waters or other accumulations of non-process waters in the basins, the Corps may request, in writing, authority to discharge these waters from outfalls 003 or 004. The request must contain a certified chemical analysis describing the pollutants and concentrations of those pollutants. The analyses must be performed for the pollutants named in Part I.B of this permit and the concentrations of those pollutants must meet the numeric and narrative limits described therein. The request must be made no later than two weeks prior to the proposed discharge and shall be sent to EPA Region III and the DDOE.

C. Additional Special Conditions

All discharges to District of Columbia waters, other than those specified in Parts I and III of this permit, are prohibited.

1. Permittee must record surface, mid-depth and bottom water temperatures 24 hours in advance of an anticipated discharge and no later than 24 hours after an unanticipated discharge during the prohibited shortnose sturgeon spawning season, (March 1 through May 15). The temperature may be recorded at the gauge at Little Falls for the surface and mid-depth readings. Because the gauge at Little Falls is not sufficiently deep to achieve a Potomac River bottom reading, the permittee shall take a bottom temperature reading from the shoreline adjacent to either Outfall 002 or 003 and compare this reading

with the mid-depth reading from the Little Falls gauge. If the readings are comparable, the USGS gauge data at Little Falls may be used for the bottom reading data. If they are not the same, then the permittee shall continue to measure bottom temperature readings at its outfalls. These water temperature readings may be discontinued upon completion of the Residuals Processing Facility which shall be no later than November 30, 2010.

2. The permittee is prohibited from discharging dredged material from the Dalecarlia Reservoir to the Potomac River.

D. Additional Studies to be Performed

1. The permittee shall continue to perform the toxicity monitoring program which constitutes a study to evaluate discharges from Outfalls 002 and 003 for acute and chronic toxicity. Such studies may include (modified) chronic toxicity tests for a total of four discharges during each calendar year using daphnids and fathead minnows, and solid phase tests using *Hyaella*. Studies shall also include acute testing using striped bass, and annual benthic toxicity testing of sediments from above and below Outfalls 002 and 003 for the life of the permit. If unacceptable toxicity is measured, an additional confirmation test may be scheduled as soon as feasible. If unacceptable toxicity is confirmed for any species at an individual outfall within one year of initiation of testing, a plan for conducting water column or sediment Toxicity Identification Evaluation (TIE) testing of that discharge will be prepared and submitted to EPA, USFWS and NMFS for approval. Upon approval of the TIE plan, appropriate TIE testing will be conducted for that outfall during the following year. A written report describing the tests and results shall be submitted to EPA, USFWS and NMFS no later than February 1 of the calendar year following completion of the studies. These studies may be discontinued upon completion of the Residuals Processing Facility or November 30, 2010, whichever comes first.
2. If any batch discharges from the sedimentation basins occur during the spring spawning season (February 15 - June 30), toxicity testing to evaluate the effect of solids on embryo-larval fish will be required. This testing shall evaluate the effect of Aqueduct solids on fish hatchability, as well as survival and growth. The study shall include toxicity testing using egg and larval stages of fathead minnows using EPA-approved methods, and fathead minnow hatchability using EPA Method 1001.0. If testing is required under this provision, toxicity testing shall be conducted on that discharge (if possible) or the next possible discharge from that outfall. A written report describing the test results shall be submitted to EPA and DDOE within 6 months of completion of the studies. All batch discharges from the sedimentation basins shall be prohibited upon

completion of the Residuals Processing Facility or November 30, 2010, whichever comes first.

E. Requirements to Minimize the Impact of an Anticipated or Unanticipated Upset or Bypass on Shortnose Sturgeon

1. Between March 1 and May 15, 24 hours in advance of an anticipated upset or bypass or within 24 hours of the commencement of an unanticipated upset or bypass, permittee must provide NOAA Fisheries with information regarding the water temperature in the vicinity of the outfall at which the discharge will occur. Prior to the anticipated upset or bypass taking place or within 24 hours of the commencement of the unanticipated bypass, this information shall be faxed to the Endangered Species Coordinator, Protected Resources Division, at 978-281-9394, to the attention of Julie Crocker or her successor. Upon the completion of the Residuals Processing Facility or November 30, 2010, whichever comes first, no anticipated or unanticipated bypasses and no upsets of the sedimentation basins will be permitted except as allowed in accordance with Parts II. B.3 and 4 of this permit.
2. In order to monitor the level of incidental take, in accordance with NMFS protocols and the ichthyoplankton sampling protocol for this facility, permittee must perform ichthyoplankton sampling immediately before, during and after a discharge which occurs during the spring spawning period (March 1 through May 15) or when water temperatures are between 8° C and 15° C. If it is not possible to perform such sampling within 24 hours of the discharge event, permittee must explain in writing why such sampling was not performed. In the event that the ichthyoplankton sampling document the take of shortnose sturgeon, the permittee must immediately contact EPA and the Endangered Species Coordinator, NOAA Fisheries Northeast Region Protected Resources Division at (978) 281-9328. This requirement will expire upon completion of the Residuals Treatment Facility or November 30, 2010, whichever comes first.